[Title of Project] Proposal

Overview:

This project aims to develop a regression model for predicting taxi fares based on several factors like distance and time of day. The model will help the New York City Taxi and Limousine Commission (TLC) streamline fare estimations and improve decision-making for both drivers and passengers. The project involves data exploration, model building, and communication of results to key stakeholders.

Milestone	Tasks	Deliverables/Reports	Relevant Stakeholder (Optional Activity)
1	Establish structure for project workflow (PACE) Plan ▾	Global-level project document outlining the project workflow, including the stages of PACE and their application to various tasks. This document should detail how the project will be structured, the sequence of tasks, and the overall project plan.	**Project Manager:** Responsible for overseeing the project and ensuring the workflow is established and followed. **Team Leads:** To ensure that the structure aligns with their team's tasks and milestones.
1a	Write a project proposal▾ Plan ▾	This document should outline the objectives, scope, and methodology of the project, including a timeline, resource requirements, and expected outcomes. It should also detail the tasks, milestones, and the overall plan for executing the project.	The project proposal will be reviewed and approved by the project manager to ensure alignment with the project's goals and objectives. The project manager may also provide feedback to refine the proposal.
2	Begin exploring the data▾ Analyze ▾	The deliverables will include a report detailing the preliminary findings from exploring the data, such as distributions, missing values, and anomalies. This report will help in understanding the structure and quality of the data.	Data Analysts, Data Engineers Involving Data Analysts and Data Engineers is crucial as they are responsible for both initial data exploration and the technical aspects of data cleaning.

			They will ensure that the data is appropriately prepared for subsequent analysis and modeling phases.
2a	**Data exploration and cleaning** [Analyze ▾]	The deliverables will include the cleaned dataset ready for further analysis and a report summarizing the data cleaning process, including any challenges encountered and how they were addressed. This ensures that the data is in a suitable state for accurate analysis and modeling.	Data Analysts, Data Engineers
3	Compute descriptive statistics [Analyze ▾] and [Construct ▾]	EDA report with summary statistics.	Data Analysts, Data Scientists
3a	[Choose a task ▾] [Analyze ▾] and [Construct ▾]	• Tableau dashboard/visualizations	Data Analysts, Project Manager
4	Conduct hypothesis testing [Analyze ▾]	• Analysis of testing results between two important variables	Data Scientists, Research Analysts
4a	Build a regression model [Construct ▾] and [Analyze ▾]	Regression model output, Model performance report	Data Scientists, Project Manager
5	Evaluate the model	Model evaluation report, performance metrics (e.g., RMSE, MAE)	Data Scientists, Project Manager

	Analyze and Execute		
5a	**Build a machine learning model** Construct ▾	• Determine the success of the model • Finalized machine learning model, model implementation code	Data Scientists, Software Developers
6	**Communicate final insights with stakeholders** Execute ▾	• Final model • Presentation or report summarizing the insights, conclusions, and recommendations based on the regression model's findings.	TLC (New York City Taxi and Limousine Commission), Project Manager
6a	**Compile summary information about the data** Plan ▾	• Report to all stakeholders • Comprehensive summary report detailing the data sources, key findings, and overall insights.	Project Manager, Data Analysts